



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/702,319	11/06/2003	Ranjan Perera	ARBG-004/07US (307197-203)	7997
58249 7590 05/16/2007 COOLEY GODWARD KRONISH LLP ATTN: Patent Group Suite 500 1200 - 19th Street, NW WASHINGTON, DC 20036-2402			EXAMINER QIAN, CELINE X	
			ART UNIT 1636	PAPER NUMBER
			MAIL DATE 05/16/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/702,319

Applicant(s)

PERERA ET AL.

Examiner

Celine X. Qian Ph.D.

Art Unit

1636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 12-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>0307</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Claims 1-15 are pending in the application. Claims 12-15 are withdrawn from consideration for being directed to non-elected subject matter. Claims 1-11 are currently under examination.

This Office Action is in response to the Amendment filed on 3/1/07.

#### ***Response to Amendment***

The rejection of claim 2 under 35 U.S.C.102 has been withdrawn because Applicant's argument is persuasive.

The rejection of claims 2, 4-8, 10 and 11 under 35 U.S.C.112 2<sup>nd</sup> paragraph has been withdrawn in light of Applicant's amendment.

The rejection of claims 1-11 under 35 U.S.C.112 1<sup>st</sup> paragraph is maintained for reasons set forth of the record mailed on 12/1/06 and further discussed below.

#### ***Response to Arguments***

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In response to this rejection, Applicants argue that the specification teaches a functional vascular tissue-specific promoter *E. grandis* cOMT promoter contained in SEQ ID NO: 113, which is the sequence disclosed in Figure 2 (nt 1019-1043). Applicants assert that SEQ ID NO: 12, which is 98.1 % identical to 1019-1676 and 1019-1643 of SEQ ID NO: 113, and 1-1643 of SEQ ID NO: 113 also has promoter activity as shown in Figure 3 and 4. Applicants further assert that 7 fragments of *E. grandis* cOMT promoter are disclosed in co-pending application 10/703,091. Applicants indicates along with the teaching of how to test fragments of the SEQ ID NO: 112 provided in the instant specification, one of ordinary skilled in the art would be able to identify the promoter contained in SEQ ID NO: 113. Moreover, Applicants argue since the sequence recited in claim 2 are disclosed in the specification, based on the teaching of the specification, one of skilled in the art would be able to test whether the claimed sequence has promoter activity. Applicants thus conclude that the written description requirement is met.

Applicants' argument has been fully considered but deemed unpersuasive. In response to Applicant's argument with regard to the description of fragments of SEQ ID NO: 113 in another application, Applicants are reminded that this information is not provided in the instant specification as originally filed, and the copending application 10/703,091 is not incorporated by reference. The 112 1<sup>st</sup> statute requires the specification to provide sufficient description of the claimed invention at the time of filing. Based on the teaching of the instant specification, there is only the promoter used in construct cOMT1700 and cOMT667 have vascular tissue specific promoter activity. Although Figure 2 discloses a sequence within SEQ ID NO: 113 in bold letter, it is unclear whether this is the sequence used in the construct depicted as cOMT667 in Figure 3. Further, it is rather confusing from Applicant's earlier statement that SEQ ID NO: 12

Art Unit: 1636

is a portion of SEQ ID NO: 113 from nt 1019-1675, whereas the response filed on 3/1/07 states that SEQ ID NO: 12 is 98.1% identical to 1019-1676. It is clear that the fragment used in cOMT667 has promoter activity, but whether this fragment is contained in the SEQ ID NO: 113 is unknown. As such, the specification only discloses the fragment from 1-1643 of SEQ ID NO: 113 has promoter activity which is contained in SEQ ID NO: 113. Thus, the specification fails to disclose a representative number of species of the claimed genus by their complete structure and other identifying character.

In response to the arguments with regard to claim 2, Applicants are reminded that describing methods of identifying the claimed sequence does not constitute as description of the actual sequences. MPEP 2163 [R-5] I section A states "The claimed invention as a whole may not be adequately described where an invention is described solely in terms of a method of its making coupled with its function and there is no described or art-recognized correlation or relationship between the structure of the invention and its function. A biomolecule sequence described only by a functional characteristic, without any known or disclosed correlation between that function and the structure of the sequence, normally is not a sufficient identifying characteristic for written description purposes, even when accompanied by a method of obtaining the claimed sequence." The instant specification does not disclose any 20-mer, 40-mer...or 600-mer as recited in claim 2, and any sequence having sequence homology with SEQ ID NO: 113, SEQ ID NO: 12 and 60 have the claimed vascular tissue specific promoter activity. As such, the merely description of the test to determine whether these claimed sequences have the claimed function is not sufficient for provide adequate description to the claimed sequences. Therefore, for reasons discussed in the previous office action and above, this rejection is maintained.

***Election/Restrictions***

Applicants requested the rejoinder of claims 12-15 upon the allowance of claims 1-11. Applicants are reminded that the *in re Ochi* rule only applies to restriction between products and methods of making and using said products. As such, upon the allowance of claims 1-11, claim 15 will be rejoined at that time. However, since claims 12-14 are directed to a plant, which is a related product to the invention of group I, and methods of producing said plant, they are not deemed as process claims for making and using the product of group I. Thus, they will not be rejoined.

***Conclusion***

No claims are allowed.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 1636

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Celine X. Qian Ph.D. whose telephone number is 571-272-0777.

The examiner can normally be reached on 9:30-6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joe Woitach Ph.D. can be reached on 571-272-0739. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Celine X Qian Ph.D.  
Examiner  
Art Unit 1636

CELINE QIAN, PH.D.  
PRIMARY EXAMINER

